

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019162**Date Inspected:** 07-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS OBG**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance Inspector (QAI) Bert Madison was present at Yerba Buena Island in California between the times noted above for observations relative to the work being performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below.

- 1). OBG Field Welding of East Line Lifting Lug Hole Inserts (SMAW)
- 2). OBG Field Splice 7E/8E Weld ID: D1 & D2, Face A – (SMAW R-1 Repairs)
- 3). Longitudinal Stiffener (ALS) Splices at OBG Field Splice 9E/10E (SMAW)

- 1). OBG Field Welding of East Line Lifting Lug Hole Inserts (SMAW)

Exterior: OBG 5E- PP35-E4-weld 1- (SMAW)

The QAI periodically observed AB/F approved welder Salvador Sandoval (ID 2202) performing fit-up, root, fill and cover pass welding at E4 weld 1 per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position. QC Inspector Steve McConnell was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1070. Fill and cover pass welding was completed and the QAI observed that the work at this location appeared to be in general compliance with contract documents.

Exterior: OBG 5E- PP35-E4-weld 2 - (SMAW)

The QAI periodically observed AB/F approved welder Salvador Sandoval (ID 2202) performing fit-up, and tack welding at E4 weld 2 per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position. See photo below. QC Inspector Steve McConnell was present to verify the fit-up, monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1070. The QAI also verified the fit-up at this location. The QAI observed that the

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work at this location appeared to be in general compliance with contract documents.

### 2). OBG Field Splice 7E/8E Weld ID: D1 & D2, Face A – (SMAW R-1 Repairs)

The QAI periodically observed AB/F approved welder Fred Kaddu (ID 2188) performing repair welding of four excavated areas per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position on the interior of OBG Field Splice 8E/9E Weld D1 & D2. See photo below. QC Inspector Fred Von Hoff was present periodically to monitor the progress and verify that the repair welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1000 Repair. The QAI observed that fill and cover pass welding of the four excavations was completed during the QA Inspectors shift and the work at this location appeared to be in general compliance with contract documents. The QAI observed that the repair areas excavated on this date on the interior of weld D1 had the following dimensions and the following Y locations:

Y = 345mm, Length = 95mm, Depth = 11mm, Width = 20mm.

Y = 450mm, Length = 100mm, Depth = 12mm, Width = 15mm.

The QAI observed that the repair areas excavated on this date on the interior of weld D2 had the following dimensions and the following Y locations:

Y = 3550mm, Length = 80mm, Depth = 11mm, Width = 20mm.

Y = 3880mm, Length = 170mm, Depth = 11mm, Width = 25mm.

### 3). Longitudinal Stiffener (ALS) Splices at OBG Field Splice 9E/10E (SMAW)

#### ALS-2

The QAI periodically observed AB/F approved welder Hua Qiang Hwang (ID 2930) at OBG Field Splice 9E/10E ALS-2, performing back welding of cover passes per the Shielded Metal Arc Welding (SMAW) process in the 3G (vertical) position. The welding at this location was from the South Face and was completed. QC Inspector Fred Von Hoff was present periodically to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1012-3. The QAI observed that the work at this location was completed and appeared to be in general compliance with contract documents.

#### ALS-6

The QAI periodically observed AB/F approved welder Xiao Jian Wan (ID 9677) at OBG Field Splice 9E/10E ALS-6, performing back welding of fill and cover passes per the Shielded Metal Arc Welding (SMAW) process in the 3G (vertical) position. The welding at this location was from the South Face and was completed. QC Inspector Fred Von Hoff was present periodically to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1012-3. The QAI observed that the work at this location appeared to be in general compliance with contract documents.

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### Summary of Conversations:

Conversations on this date with Quality Control Inspectors were general in nature and pertained to locations of welding and QC activities and locations of welds released to the QAI for verification testing.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385 5910, who represents the Office of Structural Materials for your project.

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**Inspected By:** Madison,Bert

Quality Assurance Inspector

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**Reviewed By:** Levell,Bill

QA Reviewer